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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,416	10/25/2000	Charles David Kelley	62430 US 1	2171

7590

07/17/2003

Jerold I Schneider
Arter & Hadden LLP
1801 K Street N W Suite 400 K
Washington, DC 20006

EXAMINER

CHOOBIN, BARRY

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 07/17/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/695,416

Applicant(s)

KELLEY, CHARLES DAVID

Examiner

Barry Choobin

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: .

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on October 23 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: although original claims are part of the disclosure, limitations in the claims should be supported by the specification. The specification has to be amended to incorporate "subset of the array has a first dimension which is at least five times greater than the second dimension".

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is necessary to specify the method of use if it is known to one skilled in the art that such information could be obtained without undue

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experimentation. (See MPEP 2164.01(c) How to Use the Claimed Invention) For example in instant application it is unclear as to how a person of ordinary skill in the art could obtain a subset of the array that has a first dimension which is at least five times greater than the second dimension as recited in claim 9.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu et al (US Patent 5,717,778) in view of Dunne et al (US Patent 5,149,960).

As to claim 1, Chu et al disclose a method of evaluating data, which has been scanned to create an image, which is stored in a memory represented as an array having at least two dimensions, comprising:

(a) defining a subset of the an-array as a portion of the image having at least first and second dimensions (column 9, lines 11 – 26);

(b) deriving a value for the defined subset of the array (column 9, lines 11 – 26).

However, Chu et al fail to disclose steps c – e including incrementing the subset along at least one dimension without increasing the overall dimensions of the subset.

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But on the other hand, Dunne et al in a METHOD OF CONVERGING SCANNER SIGNALS INTO COLORIMETRIC SIGNALS disclose steps c – e including incrementing the subset along at least one dimension without increasing the overall dimensions of the subset (refer for example to column 5, lines 47 – 56) in order to set of colorant estimates from the first set of color definition signals and incrementing the first set of colorant estimates in accordance with a succession of sets of error values to obtain further sets of colorant estimates (column 3, lines 1 – 5).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide the method of Dunne et al with Chu et al in order to add error values which are converted into successive sets of incremental colorant values to the first set of colorant values to obtain the sets of colorant estimates (refer for example to column 3, lines 11 – 21 of Dunne et al).

(d) deriving a value for the incremented subset of the array (column 3, lines 22 – 25 of Dunne et al); and (e) repeating steps (c) and (d) to obtain derived values for additional subsets of the image (column 3, lines 11 – 21 of Dunne et al).

As to claim 2, Dunne et al disclose the step of incrementing is along a single dimension (refer for example to column 5, lines 47 – 56).

As to claim 3, Dunne et al disclose the derived values for each subset of the scanned image are stored in a computer memory (refer for example to column 5, lines 47 – 56).

As to claim 4, Dunne et al disclose the steps of creating a look-up table for calibrating the scanned image to a standard, and substituting the value in the look-up table for the derived values (refer for example to column 3, lines 1 – 6 of Dunne et al and Fig.1, element 124 of Chu et al).

As to claim 5, Chu et al disclose portion of the array represents the gray level of the corresponding portion of the image (refer for example to column 9, lines 11 – 25).

As to claim 6, Chu et al disclose the step of deriving includes taking the mathematical average of the gray level for each portion of the array in the subset (column 9, lines 40 – 55).

As to claim 7, Dunne et al the data has been scanned using a scanner selected from the group consisting of (a) flatbed scanners, (b) scanners where the data moves along a generally straight path, and (c) scanners where the data moves along a curved path (Fig.1).

As to claim 8, Chu et al disclose the data represents a sample which has been subjected to electrophoresis (see abstract).

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As to claim 9, in view of rejection made in paragraph 3 – 5 above, to the best interpretation of the Examiner, the limitation of “first dimension is at least five times greater than the second dimension” corresponds to column 5, lines 47 – 56 of Dunne et al.

As to claim 10, Chu et al disclose the standard is a neutral density optical calibrator (column 12, lines 28 – 41).

As to claim 11, Chu et al disclose the scanned image is converted into a plurality of data points defining a curve (column 12, lines 28 – 41).

As to claim 12, Chu et al disclose the area under the curve is determined by integration (refer for example to Fig.6, and column 12, lines 27 - 41 wherein the curve is the data points which are tabulated and plotted).

As to claim 13, claim 13 is similar to claim 1 with an additional limitation, that “deriving a value for the optical density of the pixels in the defined subset of the array”. Chue et al disclose measurement density of the analyte and the background region of the digital image to obtain the total optical density of the portion of the digital image (column 9, lines 26 – 39).

Claim 14 is similarly analyzed and rejected as claim 10.

Claim 15 is similarly analyzed and rejected as claim 6.

Claim 16 is similarly analyzed and rejected as claim 11.

Claim 17 is similarly analyzed and rejected as claim 12.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A: US 2002/0154799 to Anderson et al.

B: US 6,507,664 to Anderson et al.

C: US 5,949,899 to NG.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry Choobin whose telephone number is 703-306-5787. The examiner can normally be reached on M-F 7:30 AM to 18:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 703-308-5246. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Barry Choobin

July 14, 2003


BHAVESH M. MEHTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600